

Title (en)

METHOD FOR BALANCING ELECTRICAL VALVES IN THREE-PHASE ARC FURNACES, AND DEVICE TO CARRY OUT THE METHOD

Publication

**EP 0197329 A3 19880622 (DE)**

Application

**EP 86103145 A 19860308**

Priority

DE 3512177 A 19850403

Abstract (en)

[origin: ES8703706A1] A method and apparatus for electrically balancing the phases of a three phase arc furnace, the furnace having a vessel containing a molten bath, three electrodes above the bath, and a transformer arrangement composed of three phases, each phase including a winding, the transformer arrangement being connected to the electrode so that each electrode conducts an arc current proportional to the voltage across the winding of a respective phase, by the steps of: matching the voltages between the electrodes and the bath to one another by adjusting the spacing between at least one electrode and the bath and establishing symmetry among the arc currents by: varying the voltage across at least one phase winding by a selected increment measuring the arc current amplitude in the electrode associated with the at least one phase winding after each variation step and repeating the steps of varying and measuring until the differences between the arc current amplitudes of the three electrodes are less than a given value.

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**H05B 7/148**

IPC 8 full level

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CPC (source: EP US)

**H05B 7/148** (2013.01 - EP US); **Y02P 10/25** (2015.11 - EP US)

Cited by

US5239554A; EP0429774A1

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**EP 86103145 A 19860308**; AT 86103145 T 19860308; CA 505684 A 19860402; DE 3512177 A 19850403; ES 553635 A 19860402; US 84773286 A 19860403